## THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. IV.

APRIL, 1898.

No. 4.

## MONT-SAINT-MICHEL.

N the northern coast of France, bounded to the north and south by the shores of Normandy and Brittany and to the northwest by the open sea, lies an immense plain of sand, in the midst of which rises Mont-Saint-Michel, an isolated and majestic rock girdled with ramparts and crowned with a Gothic abbey.

"Je l'avais vu d'abord de Cancale, ce château de fées planté dans la mer. Je l'avais vu confusément, ombre grise dressée sur le ciel brumeux," writes

Guy de Maupassant.

"Je le revis d'Avranches, au soleil couchant. L'immensité des sables était rouge, l'horizon était rouge, toute la baie démesurée était rouge; seule, l'abbaye escarpée, poussée là-bas, loin de la terre, comme manoir fantastique, stupéfiante comme un palais de rêve, invraisemblablement étrange et belle, restait presque noire dans les pourpres du jour mourant.

"J'allai vers elle le landemain dès l'aube, à travers les sables, l'oeil tendu sur ce bijou monstrueux, grand comme une montagne, ciselé comme un camée et vaporeux comme une mousseline. Plus j'approchais, plus je me sentais soulevé d'admiration, car rien au monde peut-être n'est plus étonnant et plus

parfait.

"Et j'errait, supris comme si j'avais découvert l'habitation d'un dieu, à travers ces salles portées par des colonnes légères ou pesantes, à travers ces couloirs, percés a jour, levant mes yeux émerveillés sur ces clochetons qui semblent des fusées parties vers le ciel et sur tout cet emmêlement incroyable de tourelles, de gargouilles, d'ornements sveltes et charmants, feu d'artifice de pierre, dentelle de granit, chef-d'œuvre d'architecture colossale et délicate."

The rock has three different and striking aspects, according to the point of view of the onlooker. From the west it is but a savage and sterile eminence, mournful and desolate; from the north it appears like a gigantic wall, which at its summit suddenly breaks into a foam of sculptured stone; from the south it seems a mountain of splendid architecture, flowering into a thousand caprices, over which the sunlight breaks and plays; and below, nestling confidently at its base and walled in by protecting ramparts, perch the houses of a little town. From the contrast between these modern houses, - so open to the light, so hospitable to the passerby, so expressive, as it were, of alertness and curiosity, - and the abbey above, sombre and bastioned, showing no other openings than rare and deep-set windows or narrow port-holes, the traveller comes to understand that he is here face to face with two civilizations, - with mediæval enmity and modern amity.

There are in France, so rich in monuments of all kinds and of all periods, numberless churches, monas-

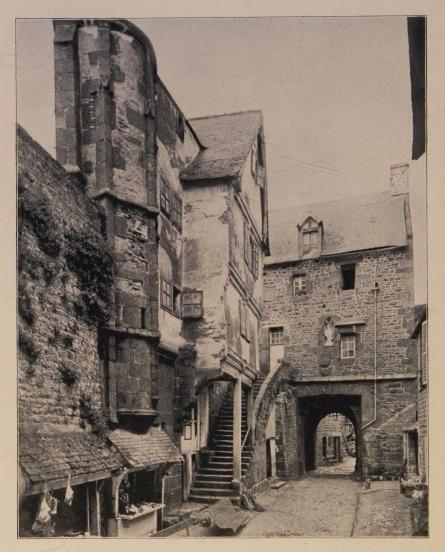


PLATE XXVI

MONT-SAINT-MICHEL. STREET IN THE TOWN

teries, and strongholds of ancient origin. These isolated edifices afford in their dispositions and their details subjects for study of the highest interest; but none of them surpasses in beauty or in grandeur Mont-Saint-Michel, which stands as the finest example of religious, monastic and military architecture in the country. It possesses, moreover, this curious peculiarity,—that it seems to have been built, not only to delight the eye of the artist and to fire the interest of the antiquary, but to unite in a single whole a résumé and synthesis, as it were, of French architecture, and by the union to mark and render easy of comparison the various steps in its progress.

There is, too, another spectacle to be seen nowhere else than at Mont-Saint-Michel,-the "coming of the sea." The phrase is awkward, but there is no other that so fittingly describes the phenomenon. At low tide the sand is uncovered for more than seven miles from the Mont, and at the moment of the flood the very sea itself seems to rush over this vast and naked plain as if purposed to seize and engulf the rock entire. The sound of the rushing waters, at first faint in the distance, becomes a formidable roar; and in a great wave, like an encircling wall, the sea invests and charges upon the Mont, pouring through the channels in the sand, and finally covering the whole surrounding plain to a height above a man's head. It is not true that the advent of the water is more rapid than a horse can gallop (the guide-books sold at the Mont show a most terrifying picture of a fleeing horseman overtaken by the tide), but it hastens steadily and implacably; and it is dangerous and has often proved fatal to stray far from the rock near the hour of the flood. The sea ebbs as rapidly as it rises; and in less than two hours after the turn of the tide the great expanse is again uncovered and passable, the sea shining at its edge like a distant river.

The early history of Mont-Saint-Michel is legendary at the best: there are no traces of constructions of an earlier date than the eleventh century, and in consequence no proofs of the existence of earlier buildings. It is



LE CHATELET

ENTRANCE TO THE ABBEY

interesting, however, to trace the traditions, which relate that, in 708, Saint Aubert, Bishop of Avranches, prompted by many and miraculous visions, founded on this isolated rock the first church ever built to the glory of St. Michel, which was thereafter called by his name. This primitive oratory, in imitation of that cave which the Saint had himself hollowed in Mount Gargan, was constructed in the form of a grotto, capable to contain about one hundred persons. Here Saint Aubert established a college of, perhaps, a dozen monks; and this small monastery rapidly acquired a wide celebrity, which gained until the tenth century, when Richard-sans-Peur replaced it by a colony of Benedictine fathers; and in 1020, Richard the Second, Duke of Normandy, founded here a church of which the traces of the transepts and four bays of the nave are still extant.

From this period forward the history of Mont-Saint-Michel is certain, and attested by no firmer proofs than the stone documents which exist in the various edifices on the Mont itself,—mute but incontrovertible witnesses to its past grandeur and importance. Nor is the history of Mont-Saint-Michel an isolated page in the wider annals of France: it has played a part in all the more important events in the march of



PLATE XXVII

THE CHURCH: EXTERIOR OF THE APSE

the nation since its foundation; and the fortress-mountain with its noble and wonderful crown of buildings, which has in turn borne the name of "The Palace of Angels," "The City of Books," "The Bulwark of France," and the "Wonder of the Occident," which has inspired poets and painters and compelled the admiration of all travellers, has a yet firmer claim upon the attention of the historian.

From Mont-Saint-Michel spread the impulse which converted to Christianity the pagan inhabitants of ancient Neustria and Normandy. It was the Mecca toward which the pilgrims of many countries flocked to implore the intercession and protection of its patron saint, and many and touching are the records of the resulting miracles and apparitions. During the dark ages the guardians of the sanctuary cherished the flickering flame of knowledge, and kept alive the ancient arts and sciences,letters, philosophy, mathematics, astronomy, music and jurisprudence. Among their scholars were numbered interpreters of the Gospels, poets and historians whose names are still remembered. Among them were the friends and counsellors of the French and English kings. In 1066 the monks sent six ships to aid William the Conqueror; and William, when he had overcome the English, wished to confide to these same warlike monks the charge of instructing and reforming his newly gained subjects. Abbot Robert de Torigni checked by his influence and firmness the tyranny of Henry the Second; another abbot, Pierre le Roy, was, in reward for services rendered to the Holy See at the time of the schism of the West, named referendary of the Roman Church. During the Hundred-years' war the monastery was converted into a stronghold, and became a fortress which defied the attacks of the enemy. When almost the whole of France had succumbed to the invaders, her flag still floated over Mont-Saint-Michel; the successful impulse which finally resulted in the expulsion of the English was derived from her defenders; and, after the deliverance of France, Louis the Sixteenth, to honor and perpetuate the memory of their achievements, founded

the still honored order of Saint-Michel.

In later times, however, abuses and disorders began to prevail among the Benedictine monks; and in 1615 they were replaced by brethren of the order of Saint Maur, who remained until the Revolution. The monastery was then converted into a prison; but in 1863 it was restored to its religious uses under the Bishop of Avranches. Mont-Saint-Michel now belongs to the State, at whose expense the buildings are being restored.

XXVI.

STREET IN THE TOWN, SHOWING THE PORT DU ROI.

According to the ancient chroniclers the town of Mont-Saint-Michel, - if the single street which winds about and clings to the rock just below the line of its splendid edifices, may be dignified by the name of town, is of great antiquity, dating from the tenth century. The few early colonists who followed the fortunes of the monastery, niched their dwellings into the crevices of the rock where they could be best protected from the encroachments of the sea and from the attacks of men. The hamlet grew slowly, guarding its exposed points by palisades, until, with the construction of the fortifications of the abbey during the thirteenth and fourteenth centuries,



GALERIE DE L'AQUILON

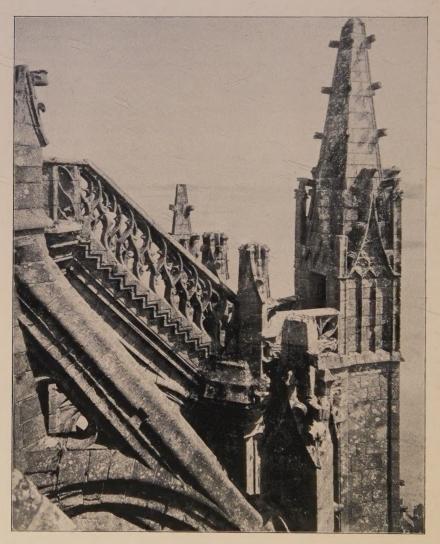


PLATE XXVIII

THE CHURCH: ESCALIER DE DENTELLE

it was hemmed in and protected by solid walls, which were later extended toward the east and south.

After having traversed the narrow and fortified passages, l'Avancée and la Barbicane, leading from the base of the rock, the visitor reaches the main entrance, la Port du Roi, which gives access to the town. The single street is lined on both sides with houses, some of which are still unchanged since the middle ages. There is nothing of unusual interest in their details, but their aspect as a whole is singularly pictur-From time immemorial the rock has been inhabited by fishermen, but the major part of the houses have always been what they are today, either inns for the reception of pilgrims and visitors, or shops for the sale of images and mementos of Saint Michel. The street closely follows the line of the outer walls, rising sharply as it winds northward, till it abuts at the Châtelet, or entrance to the abbey.

The Châtelet, a small fortress, forms the entrance to the abbey which it was constructed to guard. It is one of the later edifices, having been built in the fifteenth century by Pierre Le Roy, and consists of a square building whose northern angles are flanked by two huge, corbelled towers between which opens the passage to the stairway that mounts to the abbey.

The original architects seem to have been unwilling to diminish the height of the Mont by levelling. Resolved to detract in no degree from the majesty of so splendid a base for their church, they set about their work on the same principle as the pyramid builders; and the buildings were raised partly on the plateau circumscribing the Mont, and partly on the apex itself. As a result, the monastery has a core of rock rising, at its highest point, to the very floor of the church. The ring of lower stories rests upon walls of great thickness and upon piers united by vaults, the whole forming a substructure of perfect solidity. The view of one of these substructures, called the Galerie de l'Aquilon (Gallery of the North Wind), will give an idea of the labor which was accomplished in order to properly base the monumental constructions above.

XXVII.

THE CHURCH: EXTERIOR OF THE APSE.

The church itself consists of two parts, of different ages and styles. The Norman nave is in the massive style of the twelfth century, with slightly ornamented capitals, and a modern stone vault replacing the wooden roof which was destroyed by fire. The fine Pointed-Gothic choir is of the fifteenth century, and is surrounded by noble flying-buttresses adorned with a profusion of pinnacles. The clerestory is very lofty and is pierced by large windows.

XXVIII

THE CHURCH: L'ESCALIER DE DENTELLE.

The Escalier de Dentelle, or Stairway of Lace, built in the fifteenth century, and so named from the openness of its structure, leads from the gallery of the triforium of the church to a platform above. From this stairway there is a splendid view of the neighboring shores.

XXIX.

LA MERVEILLE: EXTERIOR FROM THE NORTH.

As the peculiarities of the site made it impossible to adhere strictly to the Benedictine system of direct communication between the main buildings of the abbey, the other buildings of the monastery grouped themselves around the church, - the great "Merveille," so called, to the north, and the Abbot's Lodging to the south. "This great collection of buildings," says Viollet-le-Duc in speaking of the former, "which fronts northward toward the open sea, stands as perhaps the finest example of the religious and military architecture of the middle-ages; and has in all times been fitly called 'The Wonder.'"

The splendid structure, built entirely of granite, was erected by one continuous effort under the inspiration of an incomparably bold and learned design of the Abbot Jourdain, to which his successors religiously adhered. "To fully appreciate this stupendous monument we must realize the extraordinary energy which enabled its architects to complete it in the comparatively short space of twenty-five years. We must take into account the conditions of its growth, its situation on the very sum-

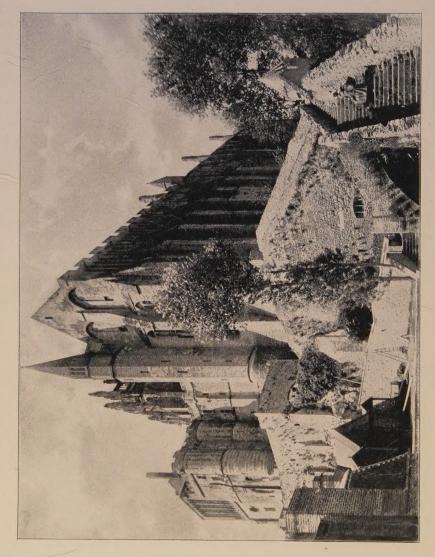


PLATE XXIX

mit of a rugged cliff, daily cut off from the mainland by the sea, and at all other times by an expanse of treacherous quicksands. We must consider the enormous difficulties of transporting materials; for all the granite used — except an unimportant quota dug from the base of the rock itself — was quarried by the monks from the neighboring coast. Then, too, it was necessary to raise the great masses of stone to the foot of the Merveille, the foundations of which are over one hundred and sixty feet from the sea-level."

The building consists of three stories,—the lowest containing the Almonry, the intermediate story the Refectory and the Salle des Chevaliers, the third the Dormitory and the Cloister.

XXX.

LA MERVEILLE: SALLE DES CHEVALIERS.

This noble hall, called the Salle des Chevaliers (commenced about 1215 and finished about 1220), served, as its name implies, as a chapter-room for the knights of the order of Saint Michel, which was founded by Louis the Eleventh. It is situated below the cloister, and is formed of four finely-vaulted aisles of unequal sizes, supported on three rows of pillars; the two rows on the northern side resting on the pillars of the cellars beneath, the third row based on the rock itself. These columns are deserving of special study. Identical at first sight, they are diversified in detail by the various foliations of their capitals.

XXXI.

LA MERVEILLE: THE CLOISTER.

This, the most beautiful part of the building and a gem of Gothic architecture, was built between 1220 and 1228. It is the uppermost story of the immense structure, and the lightest in style. Toward the central court the cloisters are supported by a double row of pointed arches resting on slim granite pillars, leaving an exquisitely groined narrow vault behind the rows. The very graceful capitals are of the plain bell-form with a circular abacus, so

common in English work but rare in France. The pillar of one arch alternates with the point of the next to allow a most graceful carved volute or sprig, issuing from the capital of every alternate pillar, to be seen. The spandrels of the arches are filled up with a creation of foliage, sprigs, flowers, garlands such as is scarcely to be seen anywhere for fanciful variety and sharpness and excellence of execution; the whole is surmounted by a cornice of flowers, all in good preservation. The arches and carvings are of soft limestone; the remainder of granite.

# Brochure Series Competitions.

In this issue of the BROCHURE (page iii) a Competition is set which will allow more play for the imagination of the artist than any that has yet appeared. It is concerned with a cover, in three colors, for a pamphlet entitled "Classical Architecture on the Shores of the Mediterranean," by Mr. Russell Sturgis; and the prize is offered by the Cutler Manufacturing Company of Rochester, N.Y., who proposed to use the best designs practically. The processes involved in the reproduction of such a design for a pamphlet with paper covers will admit of effects more novel and striking than would be possible in a design to be stamped on cloth. The judges are to be Mr. James G. Cutler of the Company, and Mr. Claude Fayette Bragdon of Rochester, the well-known draughtsman, an account of whose work was printed in the BROCHURE for October, and who has done much designing for the Company.

In the next issue of the Brochure (May) a purely architectural Competition will be set, namely, the designing of a one-room country schoolhouse. The School Journal of New York, which offers the prizes, will print the successful designs in addition to the Brochure.

In the May number, also, the award in Competitions "D" and "Extra Competition I" (for the design for a register face, and for a list of subjects for twelve numbers of the BROCHURE) will be announced. The results in both cases promise to be of unusual interest.



PLATE XXX

## The Brochure Series

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Advertising Forms close on the 30th of the month preceding issue.

While the Editor of The Brochure Series cannot hold himself responsible for the care of unsolicited photographs, drawings or manuscripts which may be submitted to him, he will always be glad to consider them; and will return those that he cannot use when postage is provided.

Entered at the Boston Post Office as Second-class Matter.

## Club Notes.

UR Correspondent in Paris writes:—
At the judgment of the Concours
Rougevin last week, the following
Americans were recognized: Mr. Barber, 1e 2e médaille. Messrs. Warren, Phillips, Wyeth, Dyer and Hunt, Honorable
Mentions. In the Architectural Concours
at the American Art Association the architectural prizes were awarded as follows:—
First prize, 120 francs, Mr. Gurd; second
prize, 80 francs, Mr. Denby; third prize,
50 francs, Mr. Bennett; Honorable Mention,
Mr. Lescher.

A regular meeting of the T-Square Club was held on Wednesday evening, March 16. Mr. Louis C. Hickman spoke on the subject of the Planning of a City Residence, and made some interesting observations on the possibilities of originality in such planning. The subject for competition for the evening was "The Façade of a City Residence," apropos of which were Mr. Hickman's remarks. First Mention was awarded to Mr. Horace H. Burrell; Second Mention to Mr. Edward Gilbert; and Third Mention to Mr. W. C. Scheetz. A Club Smoker and Special Competition in Decoration was also held on March 2. First Mention was awarded to Mr. Nicola d'Ascenzo; Second Mention to Mr. Horace H. Burrell. Mr. Frank Miles Day led the criticism on the drawings submitted, and also gave an informal talk on the New Congressional Library at Washington, speaking of the architecture and interior decorations of the building.

On Saturday evening, March 12, the St. Louis Architectural Club held their first meeting in the new Club-rooms. They have secured the entire second floor of 916A

Locust street and divided it so as to provide a large meeting-room and a reception-room which have been handsomely furnished. The quarters are by far the most desirable the Club has yet had, and the location is so central that it has become a popular rendezvous during lunch hour and in the evenings. Sixteen new members have been received within a month. As there were a number of visitors present, the business meeting was curtailed as much as possible.

It was decided to have a house-warming at an early date, and the Executive Board were instructed to make the necessary arrangements. The problem in design set for the last month was an engine-house. The drawings were hung and judges were appointed. The next problem will be a Club-house for the St. Louis Architectural Club.

The regular monthly meeting of the Sketch Club of New York was held at the Club rooms on March 12. The president, Mr. Evans, read a communication from Mr. Upjohn stating his regret that an illness would prevent his addressing the Club; and Mr. Russell Sturgis, who had also been invited to address the meeting, begged to be excused on a similar ground. Both gentlemen profered their services for some future occasion.

The drawing of the raffle for the watercolor of Lisieux Cathedral, presented to the Club by Mr. John Nolan, took place, and the sale of tickets netted the treasury \$141.00. The sale of sketches at the previous meeting brought in \$50.00.

Since the annual meeting in December, the Washington Architectural Club has been holding weekly meetings in the new quarters. Two unusually practical competitions have been held: the first, for the design for a badge to be used by the deputy building inspectors of the District of Columbia, was won by Mr. C. W. Murdock, with Mr. F. B. Wheaton in second place. Mr. Murdock's design will be used. The prize was offered by Mr. Ashford, assistant inspector of buildings, who is a member of the Club. The second competition was even more interesting, being for the design for a Memorial Hall and Library for Washington & Lee University at Lexington, Va. It is possible that the successful design may be used by the trustees. In this competition Mr. Donn received First Mention, Mr. Harris Second, Mr. Peter Third, and Mr. Murdock Fourth. The other competitors were Messrs. Adams, Huntington, Laist, Bradbury, Fuller and Elliot.

A number of informal lectures have been delivered during the past three months. Mr. Windom has talked on the history and use of decorated iron. Mr. George F. Gibbs spoke about illustrating and the reproductive processes; and his lecture, though not architectural, was perhaps the more enjoyed on that account. Mr. Breen, an electrical engineer, described the work done electrically in a new hotel at Norfolk, Va. In addition there has been a talk on the building laws of the district by Mr. Ashford, and a very



amusing lecture on some Washington architectural aberrations by Mr. Graham, - both Club members.

## Books.

The following list of books was compiled in 1890 for the Technology Architectural Review by Mr. Henry Van Brunt, to comprise those works "likely to be of most value in giving a general introduction to the study of architecture," and has proved so useful that it is here reprinted. The books mentioned may be obtained of architectural booksellers generally, or through the publishers of the BROCHURE.

sellers generally, or through the publishers of the Brochure.

Hand-Books of Architectural History. Classic and Early Christian. Gothic and Renaissance. T. Roger Smith. 2 vols. \$2.00 each.—Hand-Book of Architectural Styles. A. Rosengarten. \$4.00.—Discourses on Architecture. E. Viollet-le-Duc. Translated by Henry Van Brunt. 2 vols. \$55.00.—Dictionnaire Raisonne Bel'Architecture Francaise du XI. au XVI. Siecle. E. Viollet-le-Duc. 10 vols. \$90.00.—Histoire et Caracteres de l'Architecture en France, depuis l'epoque druidique jusqu'a nos jours. Leon Chateau. \$2.00.—The Seven Lamps of Architecture. Dinn Ruskin. \$2.75.—The Stones of Venice. John Ruskin. \$2.75.—The Stones of Venice. John Ruskin. \$2.75.—History of Architecture. 2 vols. \$7.50.—History of Architecture. 2 vols. \$10.00.
James Fergusson.—History of Architecture. 2 vols. \$10.00.
James Fergusson.—History of Architecture. 2 vols. \$10.00.
James Fergusson.—History of Architecture. 2 vols. \$2.50.—Enstory of Modern Styles of Architecture. 2 vols. \$10.00.
James Fergusson.—History of Architecture. 2 vols. \$2.50.—Enstory of Medicain Architecture. 2 vols. \$10.00.
James Fergusson.—History of Architecture. 2 vols. \$10.00.
James Fergusson.—History of Architecture. Vols. \$2.50.—Enstead.—Der Cicerone. Jac. Burkhardt. 3 vols. \$2.40.—Geschichter der Architecture. W. Lubke. 2 vols.—Development and Character of Gothic Architecture. C. H. Moore. \$5.00.—Brick and Marble in the Middle Aces. G. E. Street. \$8.00.—A B C of Gothic Architecture. John Henry Parker, C. B.—Concise Glossary of Architecture. John Henry Parker, C. B.—Concise Glossary of Architecture. John Henry Parker, C. B.—Gonic Gl

\*Deals with English practice: may be substituted by Building, Construction and Superintendence. F. E. Kidder. Part I. \$4.00. (Part II. in preparation.)

## Notes.

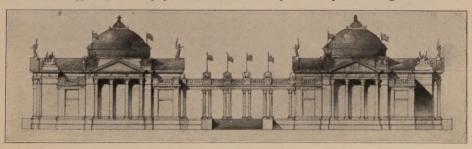
NDOUBTEDLY the most important event in American architecture since the World's Fair at Chicago will be the Trans-Mississippi Exposition, to be opened in Omaha next June.

The current issue of the Architectural Review (Volume V., Number 2), is mainly devoted to illustrating and describing this great Exposition. The description, by Mr. C. Howard Walker, the architect-in-chief, takes up exposition architecture and planning in general, and that of the Trans-Mississippi Exposition in particular. The very complete illustrations, which were drawn for the Review under Mr. Walker's supervision, show facades of all the principal buildings; and six double-page sheets of detail drawings of these buildings are reproduced from the plans of Messrs. Walker & Kimball, James Knox Taylor, Cass Gilbert, Eames & Young, J. J. Humphreys and S. S. Beaman. In addition, Mr. Edgar V. Seeler con-

tributes to the same number an article on the recent Tennessee Centennial Exposition, to which he was a member of the Committee on Architecture. There is the usual quota of criticisms and reviews.

The Mittineague Paper Co. are meeting with great success in their new line of Strathmore Drawing Board. These papers are now carried by nearly all the leading artist-supply houses in the country. They will soon put on the market a water-color and charcoal paper said to be equal to anything imported. Artists and architects should appreciate the fact that they can get as good or better paper made in our own country as is now being imported.

A nickel aluminum T-square is one of the recent improvements in draughting instruments. It has all the advantages of the steel square, without the disadvantages of weight and possible rusting. It is of about the same weight, size for size, as the ordinary cherry square. This instrument is manufactured by Mr. Charles D. Montague of 85 Montrose Street, Springfield, Mass., and full particulars may be had by addressing him.



FINE ARTS BUILDING.

